

**APPENDIX A - CLAIMS AFTER AMENDMENT  
(FOR EXAMINER'S CONVENIENCE)**

1. A computerized advertisement distribution and delivery system for dynamically delivering advertisements for inclusion in an electronic document delivered to and stored at a recipient system, the computerized advertisement distribution and delivery system comprising:

advertisement image generation means for generating an image containing a plurality of advertisements related to a specific distribution subject based on a relationship between those advertisements and storing that image in association with a network-based locator as being the up-to-date image for the specific distribution subject;

advertisement relationship determination means for intermittently determining relationships between advertisements related to a specific distribution subject and if an existing relationship between advertisements related to a specific distribution subject changes, initiating the advertisement image generation means to generate a modified up-to-date image stored in association with the network-based locator and specific distribution subject;

electronic document transmission means for creating and transmitting an electronic document containing content related to a specific distribution subject and a network-based locator associated with the image generated by the advertisement image generation means for the specific distribution subject; and

advertisement image transmission means for receiving a request for the image located at the network-based locator specified in the electronic document transmitted by the electronic document transmission means and transmitting the up-to-date image stored in association with the network-based locator at the time the request is received.

2. The computerized advertisement distribution and delivery system of claim 1 further comprising:

advertisement input receiving means for receiving at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement.

3. The computerized advertisement distribution and delivery system of claim 1 wherein the advertisement relationship determination means evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject and determines the relationship for generating an image using the highest revenue efficiency grouping of a predetermined number of advertisements.

4. The computerized advertisement distribution and delivery system of claim 2 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.

5. The advertisement distribution system of claim 1 wherein the advertisement relationship means generates a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest effective cost per thousand impressions.

6. The advertisement distribution system of claim 3 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of impressions times the bid amount for the advertisement.

7. The computerized advertisement distribution and delivery system of claim 1 wherein the advertisement relationship determination means determines relationships when any new bid value of an advertisement related to a specific distribution subject is input.

8. The computerized advertisement distribution and delivery system of claim 3 wherein the advertisement relationship determination means determines relationships when revenue efficiency calculations are made.

9. The computerized advertisement distribution and delivery system of claim 1 wherein the electronic document comprises a target network-based locator for each of a plurality of advertisements included in the image and further comprising a redirection server for receiving a request at the target network-based location and redirecting the request to a location associated with the advertisement associated with the target network-based locator in the electronic document.

10. A computerized advertisement distribution and delivery method for dynamically delivering advertisements for inclusion in an electronic document delivered to and stored at a recipient system, the method comprising the steps of:

receiving and storing at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement;

generating an image containing a plurality of advertisements related to a specific distribution subject based on a relationship between those advertisements and storing that image in association with a network-based locator as being the up-to-date image for the specific distribution subject;

intermittently determining relationships between advertisements related to a specific distribution subject changes, generating a modified up-to-date image stored in association with the network-based locator and specific distribution subject;

creating and transmitting an electronic document containing content related to a specific distribution subject and a network-based locator associated with an image generated by the preferred advertisement image generation means; and

receiving a request for an image located at the network-based locator specified in the electronic document transmitted in the electronic document transmission step and transmitting the image stored in association with the network-based locator at the time the request is received.

11. The method of claim 10 further comprising the step of:

receiving and storing at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement.

12. The method of claim 10 further wherein the step of determining relationships evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject and determines the relationship for generating an image using the highest revenue efficiency grouping of a predetermined number of advertisements.

13. The method of claim 12 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.

14. The method of claim 10 further comprising the step of generating a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest

effective cost per thousand impressions to be used to determine the relationships between the advertisements.

15. The method of claim 12 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of impressions times the bid amount for the advertisement.

16. The method of claim 12 wherein the relationships between advertisements are determined when any new bid value of an advertisement related to a specific distribution subject is input.

17. The method of claim 12 wherein the relationships between advertisements are determined when revenue efficiency calculations are made.

18. The method of claim 12 wherein the electronic document comprises a target network-based locator for each of a plurality of advertisements included in the image and further comprising the step of receiving a request at the target network-based location and redirecting the request to a location associated with the advertisement associated with the target network-based locator in the electronic document.

19. An electronic document provided in an interpreted language, the document comprising:

program interpreted code for instructing a recipient program to present content related to a specific distribution topic in a page when the electronic document is opened by the recipient program;

program interpreted code for instructing the recipient program to retrieve an image from a source network-based location and present that image in the page with the content related to the specific distribution topic when the electronic document is opened by the recipient program;

program interpreted code for instructing the recipient program to request a first web page from a first target network-based locator when a first portion of the image is selected;

program interpreted code for instructing the recipient program to request a second web page from a second target network-based locator when a second portion of the image is selected; and

wherein the first and second target network-based locators direct the recipient program to a location on the network where a first and second advertiser web page location respectively are stored.

20. The electronic document of claim 19 wherein the source network-based locator comprises a URL with an identifier related to the specific distribution subject.

21. The electronic document of claim 19 wherein the first and second target network-based locators comprises an address portion and a variable portion and wherein the address portion of the first and second target network-based locators is the same.

22. A computerized advertisement distribution and delivery system for dynamically delivering advertisements for inclusion in an electronic document delivered to and stored at a recipient system, the computerized advertisement distribution and delivery system comprising:

advertisement image generation means for generating a plurality of images corresponding to a specific distribution subject, ordering those plurality of images based on a relationship between those advertisements and storing those images in association with a plurality of

network-based locators as being the up-to-date image grouping for the specific distribution subject;

advertisement relationship determination means for intermittently determining relationships between advertisements related to a specific distribution subject and if an existing relationship between advertisements related to a specific distribution subject changes, initiating the advertisement image generation means to reorder the images and store the reordering information to generate a up-to-date image grouping stored in association with the plurality of network-based locators and specific distribution subject;

electronic document transmission means for creating and transmitting an electronic document containing content related to a specific distribution subject and at least two of the plurality of network-based locators associated with the up-to-date grouping of images generated by the advertisement image generation means for the specific distribution subject; and

advertisement image transmission means for receiving a request for the up-to-date images located at the at least two of the plurality of network-based locators specified in the electronic document transmitted by the electronic document transmission means and transmitting the up-to-date images associated with the plurality of network-based locators stored in association with the network-based locator at the time the request is received.

23. The computerized advertisement distribution and delivery system of claim 22 further comprising:

advertisement input receiving means for receiving at least one advertisement associated with a specific distribution subject and a bid representing an amount to be paid for click-throughs by end-user recipients to a target site associated with the advertisement.

24. The computerized advertisement distribution and delivery system of claim 22 wherein the advertisement relationship determination means evaluates a grouping of advertisements based on the effective revenue efficiency of the grouping compared to other potential groupings of advertisements provided by advertisers for the specific distribution subject and determines the relationship for generating the up-to-date image grouping using the highest revenue efficiency grouping of a predetermined number of advertisements.

25. The computerized advertisement distribution and delivery system of claim 22 wherein the relationship is determined based at least in part on the bid value of an advertisement for the specific distribution subject.

26. The advertisement distribution system of claim 22 wherein the advertisement relationship means generates a ranking of listings as a grouping, the grouping comprising the ranked list of advertisements with the highest effective cost per thousand impressions.

27. The advertisement distribution system of claim 25 wherein the revenue efficiency value is calculated by multiplying the number of click-throughs over a predetermined number of impressions times the bid amount for the advertisement.

28. The computerized advertisement distribution and delivery system of claim 22 wherein the advertisement relationship determination means determines relationships when any new bid value of an advertisement related to a specific distribution subject is input.

29. The computerized advertisement distribution and delivery system of claim 25 wherein the advertisement relationship determination means determines relationships when revenue efficiency calculations are made.



30. The computerized advertisement distribution and delivery system of claim 22 wherein the electronic document comprises a target network-based locator for each of a plurality of advertisements included in the image and further comprising a redirection server for receiving a request at the target network-based location and redirecting the request to a location associated with the advertisement associated with the target network-based locator in the electronic document.

31. A method for facilitating serving content-relevant ads in a document, the method comprising:

- a) associating a unique identifier with the document;
- b) providing code to be inserted into the document, the code including
  - i) image map information, and
  - ii) the unique identifier.

32. The method of claim 31 further comprising:

- c) inserting the code into the document.

33. The method of claim 32 wherein the image map information includes image source information, and wherein the image source information includes the unique identifier.

34. The method of claim 32 wherein the image map information includes image source information, and wherein the image source information is a path including the unique identifier.

35. The method of claim 34 wherein the path further includes a URL of a content-relevant ad server.

36. The method of claim 35 wherein the content-relevant ad server includes information about the content of the document.

37. The method of claim 36 wherein the information about the content of the document includes at least one of (a) one or more concepts, and (b) one or more topics.

38. The method of claim 31 wherein the image map information includes image source information, and wherein the image source information includes the unique identifier.

39. The method of claim 31 wherein the image map information includes image source information, and wherein the image source information is a path including the unique identifier.

40. The method of claim 39 wherein the path further includes a URL of a content-relevant ad server.

41. The method of claim 40 wherein the content-relevant ad server includes information about the content of the document.

42. The method of claim 41 wherein the information about the content of the document includes at least one of (a) one or more concepts, and (b) one or more topics.

43. Apparatus for facilitating serving content-relevant ads in a document, the apparatus comprising:

- a) means for associating a unique identifier with the document;
- b) means for generating code to be inserted into the document, the code including
  - i) image map information, and
  - ii) the unique identifier.

44. The apparatus of claim 43 further comprising:

c) means for inserting the code into the document.

45. The apparatus of claim 44 wherein the image map information includes image source information, and wherein the image source information includes the unique identifier.

46. The apparatus of claim 44 wherein the image map information includes image source information, and wherein the image source information is a path including the unique identifier.

47. The apparatus of claim 46 wherein the path further includes a URL of a content-relevant ad server.

48. The apparatus of claim 47 wherein the content-relevant ad server includes information about the content of the document.

49. The apparatus of claim 48 wherein the information about the content of the document includes at least one of (a) one or more concepts, and (b) one or more topics.

50. The apparatus of claim 43 wherein the image map information includes image source information, and wherein the image source information includes the unique identifier.

51. The apparatus of claim 43 wherein the image map information includes image source information, and wherein the image source information is a path including the unique identifier.

52. The apparatus of claim 51 wherein the path further includes a URL of a content-relevant ad server.

53. The apparatus of claim 52 wherein the content-relevant ad server includes information about the content of the document.

54. The apparatus of claim 53 wherein the information about the content of the document includes at least one of (a) one or more concepts, and (b) one or more topics.

55. A machine readable medium including data structures for storing information comprising:

- a) a unique identifier associated with the document;
- b) code, included in the document, the code including
  - i) image map information, and
  - ii) the unique identifier.

56. The machine readable medium of claim 55 wherein the image map information includes image source information, and wherein the image source information includes the unique identifier.

57. The machine readable medium of claim 55 wherein the image map information includes image source information, and wherein the image source information is a path including the unique identifier.

58. The machine readable medium of claim 57 wherein the path further includes a URL of a content-relevant ad server.

59. A method for determining content-relevant ads once an e-mail document is rendered on a client device, the method comprising:

- a) accepting, from the client device, an ad request including a document identifier;
- b) using content-relevance information associated with the document identifier and ad information to determine a set of one or more ads;
- c) generating an image including the one or more ads of the determined set; and

d) forwarding the generated image and a session identifier to the client device.

60. The method of claim 59 wherein the document includes image map information including image source information, and wherein the image source information includes the document identifier.

61. The method of claim 59 wherein the document includes image map information including image source information, and wherein the image source information is a path including the unique identifier.

62. The method of claim 61 wherein the path further includes a URL of the content-relevant ad server.

63. A system for determining content-relevant ads once an e-mail document is rendered on a client device, comprising:

ad request receiving means for accepting, from the client device, an ad request including a document identifier;

ad set determination means for using content-relevance information associated with the document identifier and ad information to determine a set of one or more ads;

image generation means for generating an image including the one or more ads of the determined set; and

forwarding means for forwarding the generated image and a session identifier to the client device.

64. The method of claim 63 wherein the document includes image map information including image source information, and wherein the image source information includes the document identifier.

65. (New) The method of claim 63 wherein the document includes image map information including image source information, and wherein the image source information is a path including the unique identifier.